Amendment under 37 CFR §1.114 Attorney Docket No.: 052483

Application No.: 10/534,441

Art Unit: 1796

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1-3. (Cancelled).

4. (Currently Amended): A premix composition for producing polyurethane foam, comprising a polyol, a curing catalyst, 1,1,1,3,3-pentafluoropropane, a foaming stabilizer, and a vapor pressure reducing agent comprising at least one compound tri-iso-butyl phosphate as represented by the following formula (1):

$$R^{1}$$
O

 $R^{2}-O-P=O$
O

 R^{3}

wherein R¹, R² and R³ represent <u>iso-butyl</u> a straight-chain alkyl group or branched chain alkyl group having 2 to 5 carbon atoms, R¹, R² and R³ may be the same or different, with the proviso that the compound wherein R¹, R² and R³ are all ethyl groups is excluded, the compound having a total acid content of 650 mg KOH or less as measured in accordance with MIL H-19457; and wherein said pre-mix is essentially free of isocyanate.

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5. (Original): The premix composition for producing polyurethane foam according to

claim 4, further comprising at least one supplemental vapor pressure reducing agent selected

from the group consisting of carbonates, ketones, esters, ethers, acetals, nitriles, amides,

sulfoxides, and sulfolanes.

6. (Original): The premix composition for producing polyurethane foam according to

claim 5, wherein the supplemental vapor pressure reducing agent is at least one compound

selected from the group consisting of dimethylsulfoxide, tetrahydrofuran, 1,3-dioxolane, and

dimethoxymethane.

7. (Original): The premix composition for producing polyurethane foam according to

claim 4, further comprising a supplemental foaming agent selected from the group consisting of a

hydrocarbon foaming agent, a fluorine-containing hydrocarbon foaming agent, and a fluorine-

containing ether foaming agent.

8. (Original): The premix composition for producing polyurethane foam according to

claim 7, wherein the supplemental foaming agent is at least one compound selected from the

group consisting of n-pentane, isopentane, cyclopentane, 2-methylpentane, 3-methylpentane, n-

hexane, cyclohexane, 1,1,1,3,3-pentafluorobutane, methoxy-heptafluoropropane, and methoxy-

1,1,2,2-tetrafluoroethane.

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9. (Original): The premix composition for producing polyurethane foam according to claim 4, further comprising water.

10. (Original): A method for producing a polyurethane foam, comprising the step of mixing a polyisocyanate with the premix composition according to claim 4 to form a polyurethane foam.

11. (Original): The method for producing a polyurethane foam according to claim 10, wherein the premix composition for producing polyurethane foam further comprises at least one supplemental vapor pressure reducing agent selected from the group consisting of carbonates, ketones, esters, ethers, acetals, nitriles, amides, sulfoxides, and sulfolanes.

12. (Original): The method for producing a polyurethane foam according to claim 11, wherein the supplemental vapor pressure reducing agent is at least one compound selected from the group consisting of dimethylsulfoxide, tetrahydrofuran, 1,3-dioxolane, and dimethoxymethane.

13. (Original): The method for producing a polyurethane foam according to claim 10, wherein the premix composition for producing polyurethane foam further comprises at least one supplemental foaming agent selected from the group consisting of a hydrocarbon foaming agent, a fluorine-containing hydrocarbon foaming agent, and a fluorine-containing ether foaming agent.

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14. (Original): The method for producing a polyurethane foam according to claim 13, wherein the supplemental foaming agent is at least one compound selected from the group consisting of n-pentane, isopentane, cyclopentane, 2-methylpentane, 3-methylpentane, n-hexane, cyclohexane, 1,1,1,3,3-pentafluorobutane, methoxy-heptafluoropropane, and methoxy-1,1,2,2-tetrafluoroethane.

- 15. (Original): The method for producing a polyurethane foam according to claim 10, wherein the premix composition for producing polyurethane foam further comprises water.
- 16. (Currently Amended): A premix composition comprising: (A) 1,1,1,3,3-pentafluoropropane; and (B) at least one compound tri-iso-butyl phosphate as represented by the following formula (1):

$$\begin{array}{c}
R^{1} \\
O \\
O \\
R^{2}-O-P=O \\
O \\
O \\
R^{3}
\end{array}$$

wherein R¹, R² and R³ represent <u>iso-butyl</u> a straight-chain alkyl group or branched-chain alkyl group having 2 to 5 carbon atoms, R⁴, R² and R³ may be the same or different, with the proviso

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that the compound wherein R¹, R² and R³ are all ethyl groups is excluded, the compound having a total acid content of 650 mg KOH or less as measured in accordance with MIL H-19457; and wherein said premix composition is free of isocyanate.

17-18. (Cancelled).

19. (Previously Presented): The premix composition according to claim 5, wherein the supplemental vapor pressure reducing agent is contained in an amount of 0.1 to 100 parts by weight per 100 parts by weight of the compound represented by formula (1).

20. (Previously Presented): The premix composition according to claim 16, further comprising at least one supplemental vapor pressure reducing agent selected from the group consisting of carbonates, ketones, esters, ethers, acetals, nitriles, amides, sulfoxides, and sulfolanes.

21. (Previously Presented): The premix composition according to claim 20, wherein the supplemental vapor pressure reducing agent is at least one compound selected from the group consisting of dimethylsulfoxide, tetrahydrofuran, 1,3-dioxolane, and dimethoxymethane.

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22. (Currently Amended): A method for reducing the vapor pressure of 1,1,1,3,3 pentafluoropropane, comprising mixing 1,1,1,3,3-pentafluoropropane with at least one eompound tri-iso-butyl phosphate as represented by the following formula (1):

$$\begin{array}{c}
R^{1} \\
O \\
O \\
R^{2}-O-P=O \\
O \\
I \\
R^{3}
\end{array}$$

wherein R¹, R² and R³ represent iso-butyl a straight-chain alkyl group or branched-chain alkyl group having 2 to 5 carbon atoms, R¹, R² and R³ may be the same or different, with the proviso that the compound wherein R¹, R² and R³ are all ethyl groups is excluded, the compound having a total acid content of 650 mg KOH or less as measured in accordance with MIL H-19457.

23. (New): The premix composition for producing polyurethane foam according to claim 4, wherein the vapor pressure reducing agent consists of tri-iso-butyl phosphate as represented by the formula (1).